

High Performance Paint Specification

PS-E008 TYPICAL AVOIDABLE SURFACE PROBLEMS – PINHOLING AND BLISTERING

INTRODUCTION:

This document discusses the issues often experienced by painting over concrete substrate that has pinholes (often referred to as bug holes) and the resulting pinholes or cratering that may occur in the coating surface. Pinholes are aggravating. These tiny holes in the concrete surface are formed by air bubbles trapped in the concrete. Bubbles become pinholes when they form on the surface of the concrete during casting and when the concrete is media blasted, ground, or abraded.

PROBLEM:



Typically, it is recommended that EPOTEC NT is applied early in the morning particularly in the heat of summer to minimise the effect of direct sunlight heating the substrate and the air inside the bug hole which then expands and forces its way through the paint film during drying.

EPOTEC NT has been designed with extended air release and flow, to mitigate the effect of air expansion from bug holes and aid flow across and into surface imperfections. However, it the air entrapped expands as the film is forming, bubbles and pin holes may occur.

The photo on the left shows a pinhole that has had air released while the film was still setting up, the photo on the right shows a pinhole that has bubbled and popped when the film was flashing off and the resultant crater formed in the drying film.

Neither of these are a paint problem. They are only cosmetic imperfections, if correct surface preparation was undertaken and

Coating Technologies Limited, 10 Andromeda Crescent, East Tamaki, Auckland 2013, New Zealand

Phone: 0064 9 837 0897 <u>www.cotec.co.nz</u>

Technical information given verbally or in writing is based on knowledge and research, given in good faith and believed to be reliable, but no guarantee of accuracy is made or implied. Since methods and conditions of use are beyond our control, all merchandise is sold and received subject to the condition that our liability whether express or implied for any defect in quality, or for any lack of fitness for the specified use thereof, is limited to the return of the purchase price if a written claim is made within 14 days from the date of delivery. It is recommended that the user makes his or her own tests to determine the suitability of the product for his own requirements.

TUFF FLOOR/CONCRETE WB EPOXY SEALER applied correctly, followed by 2-3 coats of EPOTEC NT the pool coating system will be fully functional.

Note: The surface will likely be harder to clean.

CORRECTION:

If the Concrete has been exposed in preparation and pin holes are visible:

- 1. Apply TUFF FLOOR/CONCRETE WB EPOXY SEALER as per TDS.
- 2. Apply first coat of EPOTEC NT thinned with EPOTEC 107 THINNER 2-3%. Application below 18°C consider warming product prior to mixing to reduce viscosity. Apply following instructions and leave to dry.
- 3. If pinholes are visible, mix EPOTEC NT and add TROWEL-IT additive as per TDS for EPOTEC NT. Working out of direct sunlight if possible, apply by Towel and lay off filling voids to a smooth finish. Leave to dry (overnight), lightly sand to feather edges and make surface uniform. Clean down.
- 4. Apply remaining coats of EPOTEC NT as required.

If you experience pin holing after applying your first coat of EPOTEC NT, move to step 3.

Air Entrapment when power mixing may also result in air bubbles. Ensure EPOTEC NT is drill mixed without air being entrapped.

Only use WOOSTER PRO-DOOZ 10-13mm nap sleeves or equivalent quality EPOXY SAFE SLEEVES. It is critical correct film builds are applied, refer to TDS, and re-coat times are followed.

NOTE:

- * EPOTEC 107 THINNER is flammable so avoid contact with naked flames, sparks or electrical ignition sources.
- * Always wear protective apparatus such as gloves, dust mask etc.

ISSUE: 01 DATE: AUG 22